

Claims

1. A lithium tantalate substrate having volume resistivity which has been controlled within the range
5 of from 10^{10} to 10^{13} Ω cm.

2. The lithium tantalate substrate according to claim 1, which has a heat history of being subjected to heat treatment at a temperature kept to from 350 to
10 600°C, in the state of being buried in a mixed powder of Al and Al_2O_3 .

3. A process for manufacturing a lithium tantalate substrate by using a lithium tantalate
15 crystal grown by the Czochralski method, wherein;
a lithium tantalate crystal worked in the state of a substrate is buried in a mixed powder of Al and Al_2O_3 , followed by heat treatment carried out at a temperature kept to from 350 to 600°C, to manufacture
20 a lithium tantalate substrate having volume resistivity which has been controlled within the range of from 10^{10} to 10^{13} Ω cm.

4. The process for manufacturing a lithium
25 tantalate substrate according to claim 3, wherein said heat treatment is carried out in a reduced-pressure

atmosphere of an inert gas.